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THE FLORA OF THE TOWN OF SOUTHOLD, LONG ISLAND AND GARDINER'S ISLAND

BY STEWART H. BURNHAM AND ROY A. LATHAM

FIRST SUPPLEMENTARY LIST

The preliminary flora was published in Torreya 14: 201–225. Nov. 1914 and 229–254. Dec. 1914. The majority of the enumerated plants were collected in 1915. Mr. Frank Dobbin of Shushan, N. Y., also visited Orient Aug. 10–15, 1915, and spent considerable of the time collecting.

The territory of the region included in this flora lies wholly in the glaciated region. Along the shore of Long Island Sound is the obscure inner moraine of the Wisconsin ice sheet; and from this moraine is an outwash of thin deposits forming sandy plains over the older Pleistocene formation which shows through and in places controls the topography. Some of the beaches and many of the swamps and marshes belong to the Recent epoch. Gardiner's Island lies between the inner and outer moraines of the Wisconsin ice sheet: and being of more rugged topography "seems to have encouraged a more extensive reworking of the" older Pleistocene "deposits by the Wisconsin ice and a greater deposition of" the till sheet or ground moraine. ("The Geology of Long Island," by Myron L. Fuller, U. S. Geol. Survey Professional Paper 82: Washington. 1914.)

The authors are greatly indebted to many specialists, who have made it possible to publish the following catalogue of species.

INSECT GALLS*

Andricus cornigerus O. S.—Horned Knot Oak Gall. Asphondylia globosus O. S.—On stems of Helianthus divaricatus.

* The majority of these galls were named by Dr. E. P. Felt, state entomologist of the State of New York.

[No. 6, Vol. 17 of TORREYA, comprising pp. 91-110, was issued 13 June, 1917.]

Diastrophus Potentillae Bass.-Cinquefoil Axil Gall; on stems of Potentilla canadensis.

Rhopalomyia Solidaginis Loew—Goldenrod Bunch Gall. Trypeta Solidaginis Fitch—Goldenrod Ball Gall.

THALLOPHYTA

EUTHALLOPHYTA

EUPHYCEAE*

Botrydium granulatum (L.) Grev.-On wet earth.

Griffithsia tenuis Ag.-Long Island Sound.

Polysiphonia violacea (Roth) Grev.-On rocks in the Sound.

Ralfsia verrucosa (Aresch.) J. Ag.-On rocks in shallow water.

Rhizoclonium hieroglyphicum (Ag.) Kütz.—About roots of bushes in a fresh water swamp.

Rivularia atra Roth-On rocks at the water's edge.

Ulothrix implexa Kütz .- On rocks at mid-tide mark, Orient bay.

FUNGI

SCHIZOMYCETES

Bacillus tracheiphilus Erw. Smith-On Cucumis sativus; determined by Mr. F. V. Rand.

EUMYCETES

Phytophthora Phaseoli Thaxt.—On Phaseolus lunatus; determined by Mr. Rand.
Plasmopara cubensis (B. & C.) Humphrey—On Cucumis sativus; determined by Mr. Rand.

ASCOMYCETES (EXCLUDING PYRENOMYCETES)

- Chlorosplenium chlora (Schw.) Mass.-On decayed wood of Quercus coccinca; determined by Dr. F. J. Seaver.
- Dasyscypha Ellisiana (Rehm) Sacc.—On bark of living Pinus rigida: determined by Dr. Seaver.
- Lecanidion atr.:tum (Hedw.) Rabenh.-On bare wood of Toxylon pomiferum; determined by Dr. C. E. Fairman.
- Melittosporium hysterinum (Fr.) Gill.—On bare wood of Juniperus virginiana; determined by Dr. Fairman.
- Pseudopeziza Medicaginis (Lib.) Sacc.—On leaves of Medicago sativa; determined by Dr. Fairman.
- Taphrina Quercus (Cke.) Sacc.—On leaves of Quercus velutina; determined by 'Dr. H. D. House.

ASCOMYCETES (PYRENOMYCETES)†

Anthostomella sepelibilis (B. & C.) Sacc .- On old stems of Smilax rotundifolia.

Boti yosphaeria Ribis Grossen. & Duggar-On old stems of cultivated Grossularia.

* The algae were determined by Dr. M. A. Howe and are preserved in the Herbarium of the New York Botanical Garden.

† Unless otherwise stated, the *Pyrenomycetes* were determined by Dr. C. E. Fairman.

- Cucurbitaria elongata (Fr.) Grev.—On old twigs of Robinia Pseudo-Acacia; also the macropycnidial stage, Hendersonia Robiniae West: determined by Dr. House. Diaporthe ocularia (C. & E.) Sacc.—On twigs and branches of Ilex verticillata.
- D. rhoina (C. & E.) E. & E.-On twigs and branches of Rhus copallina.
- Diatrypella Cephalanthi (Schw.) Sacc .- On twigs of Cephalanthus occidentalis.
- Dothidea ribesia (Pers.) Fr.-On old stems of cultivated Grossularia.
- *Eutypella deusta* (E. & E.) E. & E.—On old wood of oak; determined by Dr. House. *E. prunastri* (Pers.) Sacc.—On twigs and branches of *Padus virginiana*.

Fimetaria fimicola (Roberge) Griffiths & Seaver-On old paper.

- Gloniopsis Cookeana (Ger.) Sacc.—On sumac, Myrica carolinensis and Xolisma ligustrina; determined by Dr. House.
- G. fibriseda (Ger.) Sacc .- On twigs of Acer rubrum.
- G. Lonicerae (Phill. & Hark.) Berl. & Vogl.-On twigs of Lonicera japonica.
- Hypoderma Smilacis (Schw.) Rehm-On dead stems of Smilax rotundifolia.
- Hypoxylon cohaerens (Pers.) Fr.-On branches of Fagus grandiflora at Greenport.

H. smilacicolum Howe-On stems of Smilax rotundifolia at Greenport.

- Hysteriographium Vaccinii (Schw.) Fairman, n. comb.—On twigs of Vaccinium atrococcum at Greenport. In Saccardo's Sylloge Fungorum this is described as Hysterium Vaccinii Schw.
- H. vulvatum (Schw.) Sacc .- On Qvercus velutina; determined by Dr. House.

Laestadia polystigma (E. & E.) Sacc.-On leaves of Quercus velutina.

- Lophiotrema praemorsum (Lasch) Sacc.—On old stems of Brassica oleracea gemmifera (Brussels sprouts).
- Lophodermium arundinaceum (Schrad.) Chev.—On Ammophila arenaria. Dr. Fairman says, "I have found L. arundinaceum in America on grain stems but have no specimens on Ammophila: and have no knowledge of its ever having been found here on this host."
- Mazzantia sepium Sacc. & Penz.—On stems of Convolvulus sepium. Dr. Fairman says, "I have never found it in America; although I have specimens from London, Canada."
- Myiocopron Smilacis (DeNot.) Sacc .- On twigs of Smilax rolundifolia at Greenport.
- Nummularia microplaca (B. & C.) Cke.—On dead branches of Sassafras Sassafras. Dr. Fairman says, "Reprinted in this country from the South, Ohio and Virginia."
- Phyllachora Cyperi Rehm-On Cyperus esculentus; determined by Dr. House.
- Physalospora Potentillae Rostr.—On stems and galls of Potentilla canadensis, Dr. Fairman says the type of this fungus was found on Potentilla maculata in Greenland: and that "it has not been found in this country by anyone before so far as I know. The best specimens of your collection are on the galls," Diastrophus Potentillae.
- Pleospora herbarum (Pers.) Rabenh.—On stems of Allium Cepa, Asparagus officinalis, Vagnera stellata, Moehringia lateriflora, Silene caroliniana and Glaucium Glaucium.
- P. Salsolae Fckl.—On stems of Salicornia ambigua and Salsola Kali. Dr. Fairman says, "I have never had it from this country: but Ellis and Everhart list it on Salicornia herbacea, California (Harkness)."
- Rhytisma Ilicis-canadensis Schw.—On leaves of Ilex verticillata at Southold; determined by Dr. House.

Valsa Liquidambaris Schw.—On branches of Hamamelis virginiana; determined by Dr. House.

V. pauperata C. & E .- On twigs and branches of Acer rubrum at Greenport.

HYPOMYCETES

- Cercos pora Teucrii E. & K.—"Orient Point, on living leaves of Teucrium canadense." N. Y. State Mus. Bull. 179: 26. 1915.
- Cladosporium Typhae Schw.—On old leaves and stems of Typha latifolia; determined by Dr. Fairman.
- Trichoderma lignorum (Tode) Harz.—On bare wood of Quercus velutina; determined by Dr. Fairman.

MELANCONIALES

Pestalozzia conigena Lev.-On cones of Thuja occidentalis; determined by Dr. Fairman.

SPHAEROPSIDEAE*

Cytospora leucostoma (Pers.) Sacc .- On twigs of Amygdalus Persica.

Diplodia hyalospora C. & E.-On old stems of Chenopodium album.

D. Maydis (Berk.) Sacc .- On old stalks of Zea Mays.

Diplodina Atriplicis Vestgr.—On old stems and withered leaves of Atriplex hastata. Dr. Fairman says when this fungus occurs on stems, it is called Diplodina Atriplicis; when on leaves, Ascochyla Atriplicis Died. On your plants "we have fungi on both, so that it is as you please what you say, Diplodina or Ascochyta, at present. I have referred yours to Diplodina because most prominent on the stems."

Labrella nilida Schw.-On stems of Polygonatum commutatum.

Leptostroma filicinum Fr.-On old stipes of Athyrium Filix-foemina.

L. virgultorum Sacc .- On stems of Aralia nudicaulis.

Leptostromella hysterioides (Fr.) Sacc .- Determined by Dr. House.

- Leptothyrium litigiosum (Desm.) Sacc.—On Osmunda cinnamomea; determined by Dr. House.
- L. Pomi (Mont. & Fr.) Sacc .- On the skin of the fruit of Malus Malus.
- Macrophoma pulchrispora (Pk. & Clint.) Sacc.-On stems of Persicaria pennsylvanica.
- Phlyctaena arcuata Berk .- On dead stems of Arctium minus.
- P. complanata (B. & C.) Sacc.-On dead stems of Tiniaria Convolvulus.
- Phoma Cydoniae Sacc. & Schulz .- On old fruit of Cydonia vulgaris (Quince).
- P. longipes B. & C.—"Orient Point on Morus alba." The plant reported in the preliminary list to Phoma moricola Sacc. should be referred to this species. N. Y. State Mus. Bull. 188: 37. 1916.
- P. media E. & E.-On old stems and branches of Asparagus officinalis.
- P. nebulosa (Pers.) Sacc .- On dead stems of Lepidium virginicum.
- P. sepincola (Kickx.) Sacc .- On branches of rambler rose.
- P. strobiligena Desm.-On cones of Thuja occidentalis.
- P. verbascicola (Schw.) Cke.-On stems of Verbascum Thapsus.

Phomopsis cryptica (Nits.) Trav.-On twigs of Lonicera japonica.

* Unless otherwise stated, the Sphaeropsideae were determined by Dr. C. E. Fairman.

- P. occidentalis Sacc., var. irregularis Trav.—On twigs and branches of Gleditschia triacanthos.
- P. vepris (Nits.) Trav.-On stems of Rubus procumbens.
- Phyllosticta Baccharidis Dearness & House—"On living leaves of Baccharis halimifolia, Orient Point." This species is described in N. Y. State Mus. Bull. 179:
 29. 1915: and the type is in the herbarium of the N. Y. State Museum.
- P. orobella Sacc.—"On languishing leaves of Lathyrus maritimus, Orient Point, New to America." N. Y. State Mus. Bull. 179: 30. 1915.
- Rhabdospora Lonicerae (C. & E.) Sacc.—On dead twigs of Lonicera japonica. Dr. Fairman says, "a rare find. It was originally found by Ellis on Lonicera in New Jersey and sent by him to Cooke who called it Cryptosporium Lonicerae C. & E. in Grevillea 6: 83. March 1878. It has curved hyaline spores and really seems to be a good Cryptosporium. I do not think Ellis ever found it again."
- R. subgrisea Pk .- On stems of Solidago sempervirens; determined by Dr. House.
- Septoria Caryophylii Scalia—On leaves of Dianthus caryophyllus. Dr. Fairman says, "I presume this has been called S. Dianthi: but it agrees better with the above."
- S. graminum Desm.—On leaves of *Dactylis glomerata*; determined by Dr. House. Sphaeronaema acerinum Pk.—On dead bark and twigs of Acer rubrum.
- Sphaeropsis Arctostaphylii (Vize) Sacc.-On bare wood.
- S. Celastrina Pk.-On Celastrus scandens.
- S. Juniperi Pk .-- On Juniperus virginiana; determined by Dr. House.
- S. rubicola C. & E.-On stems of Rubus procumbens.
- S. sepulta E. & E.—On dead twigs of Morus alba at Orient Point. N. Y. State Mus. Bull. 188: 53. 1916.

Vermicularia petiolicola P. Brun-On petioles of Geranium maculatum.

BASIDIOMYCETES

USTILAGINACEAE

Urocystis Cepulae Frost-On Allium Cepa; determined by Dr. G. P. Clinton.

Ustilago Crus-galli Tracy & Earle—On Echinochloa Crus-galli; determined by Dr. Clinton.

U. Rabenhorstiana Kühn-On Syntherisma sanguinale; determined by Dr. Clinton.

MELAMPSORACEAE*

Melampsora Medusae Thüm.-On leaves of Populus tremuloides.

COLEOSPORIACEAE

Coleosporium delicatulum (A. & K.) H. & L.—Southold on leaves of Euthamia tenuifolia.

C. Helianthi (Schw.) Arth .- On leaves of Helianthus divaricatus.

* Unless otherwise stated the Rusts were determined by Dr. J. C. Arthur and are preserved in the Herbarium of Dr. Arthur at Purdue University, Lafayette, Indiana. The authors are indebted to Dr. Arthur, who has read the manuscript of the Rusts.

PUCCINIACEAE

Gymnosporangium globosum Farl.—Greenport on Crataegus chrysocarpa.

Kuehneola Uredinis (Lk.) Arth .- On leaves of Rubus alleghaniensis.

- Phragmidium americanum Diet .- On leaves of Rosa blanda.
- P. Potentillae-canadensis Diet .- On leaves of Potentilla canadensis.
- P. Rosae-seligerae Diet .- On leaves of Rosa carolina.
- Polythelis Thalictri (Chev.) Arth.—On leaves of Thalictrum revolutum. (Puccinia Thalictri Chev.)
- Puccinia Acetosae (Schum.) Körn.—On leaves of Rumex Acetosella. Dr. Arthur says, "this rust has been found at Woods Hole, Massachusetts, in South Carolina and Florida. Your locality making the fourth one."
- P. angustata Pk.-Southold and Greenport on Scirpus cyperinus and S. pedicillatus.
- P. canaliculata (Schw.) Lagerh.—On Cyperus esculentus, the telial stage; determined by Dr. House.
- P. Caricis-strictae Diet.-Southold on Carex stricta, the amphisporal stage.
- P. Cichorii (DC.) Bell-On leaves of Cichorium Intybus.
- P. Clematidis (DC.) Lagerh.—On leaves of Agropyron repens and Hordeum satirum. (Puccinia Agropyri E. & E.; P. agropyrina Erikss.)
- P. Convolvuli (Pers.) Cast .- On leaves of Convolvulus sepium.
- P. Eleocharidis Arth.-On Eleocharis tenuis.
- P. epiphylla (L.) Wettst.-On Poa pratensis. (Puccinia poarum Niessl.)
- P. extensicola Plowr.—On Carex hormathodes, C. scoparia, C. straminea, C. vulpinoidea and Dulichium arundinaceum. (Puccinia Dulichii Sydow; P. vulpinoidis Diet. & Holw.)
- P. fraxinata (Lk.) Arth.—On Spartina patens. Dr. Arthur says we have this rust "on the same host from Delaware and New Jersey: but not before from any point in New York."
- P. Grossulariae (Schum.) Lagerh.—Greenport on Carex debilis. (Puccinia uniporula Orton.)
- P. Impatientis (Schw.) Arth.—Gardiner's Island on Agrostis alba and Elymus striatus. (Puccinia perminuta Arth.)
- P. Phlei-pratensis Erikss. & Henn.-On Phleum pratense.
- P. poculiformis (Jacq.) Wettst.-On Agrostis alba and Dactylis glomerata.
- Puccinia Polygoni-amphibii Pers.—On leaves of Persicaria pennsylvanica, P. punctata, Tiniaria scandens and Tovara virginiana.
- P. Prenanthis-racemosae Sydow-Greenport on leaves of Nabalus trifoliolatus.
- P. Proserpinaceae Farl.—Greenport on leaves of Proserpinace palustris. Dr. Arthur says, "known only from Massachusetts, Illinois and Wisconsin."
- P. Rhamni (Pers.) Wettst .- On Avena sativa.
- P. Smilacis Schw.-Southold on Smilax glauca.
- P. Xanthii Schw.-On Xanthium commune.

Uredinopsis mirabilis (Pk.) Magn.-Gardiner's Island on Onoclea sensibilis.

- Uromyces fallens (Desmaz.) Kern-On Trifolium pratense. (Nigredo fallens (Desmaz.) Arth.)
- U. Hyperici-frondosi (Schw.) Arth.—Greenport on Triadenum virginicum. (Nigredo Hyperici-frondosi (Schw.) Arth.)
- U. Junci-effusi Sydow-Greenport on Juncus effusus. (Nigredo Junci-effusi (Sydow) Arth.)

- U. minutus Diet .- On Carex virescens. (Nigredo minuta (Diet.) Arth.)
- U. pedatatus (Schw.) J. Sheldon-Southold on Andropogon virginicus. (Nigredo pedatata (Schw.) Arth.)
- U. perigynius Halst.—Greenport on Carex intumescens. (Nigredo perigynia Halst.) Arth.
- U. Polygoni (Pers.) Fckl.—On leaves of Polygonum aviculare. (Nigredo Polygoni (Pers.) Arth.)
- U. Scirpi (Cast.) Burr .- On Scirpus robustus.
- U. Trifolii (Hedw. f.) Lev.—On leaves of Trifolium hybridum and T. repens. (Nigredo Trifolii (Hedw. f.) Arth.)
- U. uniporulus Kern-On Carex virescens. (Nigredo uniporula (Kern) Arth.)

TREMELLACEAE

Ulocolla foliacea (Pers.) Bref.—On dead bark of Quercus velutina; determined by Dr. C. G. Lloyd.

DACRYOMYCETACEAE

Dacryomyces deliquescens (Bull.) Duby-On rotten wood of oak; determined by Dr. Lloyd.

THELEPHORACEAE

- Corticium incarnatum (Pers.) Fr.—On branches of Sambucus canadensis; determined by Dr. E. A. Burt.
- Stereum albo-badium Schw.—On old stems of *Brassica oleracea gemmifera* (Brussels sprouts); determined by Dr. Burt, who says, "a species I have seen heretofore on woody stems only."
- S. fasciatum Schw.—Greenport on dead trunk of *Quercus velutina*; determined by Dr. Lloyd. *Stereum versicolor* Fr. previously listed belongs here.
- Tremellodendron pallidum (Schw.) Burt-On earth in low woods at Greenport; determined by Dr. Lloyd. (Thelephora Schweinitzii Pk.)

HYDNACEAE

Hydnum imbricatum L.—Moist soil in woods at Greenport; determined by Dr Lloyd.

POLYPORACEAE*

Boletus Frostii Russell—Rare in rich earth in open woods, Greenport and Gardiner's Island.

Cyclomyces Greeni Berk .- On earth in rich woods, Greenport.

Merulius Corium (Pers.) Fr.-On old bark of Myrica carolinensis.

Polyporus adustus (Willd.) Fr.-On old wood of Quercus velutina at Greenport.

P. albellus Pk.-On old wood.

P. amygdalinus Berk.—Greenport on stump of Quercus velutina. Dr. Lloyd says, "the second specimen I have seen, a very interesting find."

P. dichrous Fr.—On stumps of Juniperus virginiana.

* Except the *Boletus*, the Polypores were determined by Dr. C. G. Lloyd and are preserved in the Herbarium of the Lloyd Museum and Library, Cincinnati, Ohio.

P. squamosus (Huds.) Fr.-On living trunk of Salix nigra, Gardiner's Island.

Polystictus cinnamomeus (Jacq.) Sacc .- Rich soil in oak woods at Greenport.

Poria medulae-panus (Pers.) Fr.-On spruce timber in a cellar.

P. pinea Pk.-On old log of Pinus Strobus.

P. radula (Pers.) Fr .- On Quercus velutina and rotten wood of Sassafras Sassafras.

AGARICACEAE

Panus levis Berk.—On oak wood in a shed; determined by Dr. Lloyd, who says, "this is an American plant that is very rarely received by me. The spores of Panus levis are 4-6 x 10-12µ and slightly arcuate."

Pleurotus striatulus Fr.-On old wood; determined by Dr. Lloyd.

GASTEROMYCETES

- Catastoma circumscissum (B. & C.) Morg.-Sandy soil in open cedar woods; determined by Dr. Lloyd.
- Lycoperdon umbrinum Pers.—Sandy soil in open woods; determined by Dr. Lloyd. (Lycoperdon glabellum Pk.)
- Sphacrobolus stellatus Tode-On old wood of Vitis bicolor; determined by Dr. Fairman.

LICHENES*

Biatora rivulosa (Ach.) Fr.-On bark of oak at Greenport.

B. uliginosa (Schrad.) Fr.-In open places on light bare soil.

Cladonia macilenta styracella (Ach.) Wainio—On old rotten pine log in sandy woods. C. ochrochlora ceratodes Fkl.—On sandy soil in open woods.

Cyrtidula rhoica Minks-On bark of sumac.

- Lecanora (§ Ochrolechia) pallescens (L.) Schaer.—On bark of large oak trees in woods at Greenport.
- Lobularia pulmonaria (L.) Hoffm.—On trunks of trees in woods at Greenport. (Sticta pulmonaria (L.) Ach.)
- Pelligera polydactyla (Neck.) Hoffm.—About mossy roots of trees in moist woods at Greenport.
- P. scutata (Dicks.) Leight.—Mossy banks in woods at Greenport; determined by Miss Mary F. Miller.

Physcia obscura virella (Ach.) Leight .-- On bark of oak in woods at Greenport.

HEPATICAE[†]

Asterella tenella (L.) Bv.-On heavy soil along roadside in cedar woods.

Cephalozia fluitans (Nees) Spruce-Southold about base of trees in a sandy swamp; determined by Dr. A. W. Evans.

C. Francisci (Hook.) Dum.—On clean moist sand, at edge of a cranberry bog at the lake on Horton Point. Southold, forming beautiful green carpets 6 x 10 feet; determined by Dr. G. H. Conklin and Dr. Evans. Dr. Conklin says this species "has been found only a few times in North America. This the fourth or fifth

* Unless otherwise stated, the Lichens were determined by Mr. G. K. Merrill, Rockland, Maine.

† Unless otherwise stated, the Hepatics were determined by Dr. G. H. Conklin, Superior, Wisconsin: and are preserved in the Hepatic Herbarium of The Sullivant Moss Society. time." Dr. Evans in his "Notes on North American Hepaticae. VI" in Bryol. 18: 83. Sept. 1915 says that the geographical distribution of *Cephalozia Francisci* "in North America is so incompletely known that the report of the following new stations seem justifiable." A station on Cape Breton Island, Nova Scotia: and "Southold and Orient Point, Long Island, New York, R. Latham," are reported. "The last two stations which represents a marked extension of the known range to the southward," having been found previously in Maine and New Hampshire," are of especial interest and indicate that the plant ought to be looked for in eastern Connecticut and Rhode Island." This rare hepatic has only been found at Horton Point, Southold: but has never been found at Orient Point, as stated above!

- C. macrostachya Kaal.—Southold about base of bushes in a sandy swamp; determined by Dr. Evans.
- C. media Lindb.-On old logs in moist woods at Greenport.
- Fossombronia foveolata Lindb.—Sandy swamps, Horton Point; and dry soil in cedar woods, Orient, fruiting in November; determined by Dr. Evans and Dr. Conklin.

Lophocolea minor Nees-On a mossy rock in a swamp.

Notothylas orbicularis (Schw.) Sull.-Muddy bottom of a pasture pond at Orient.

- Odontoschisma Sphagni (Dicks.) Dumort.—Edge of woodland swamp at Orient; determined by Miss Annie Lorenz.
- Pallavicinia Lyellii (Hook.) S. F. Gray-About mossy base of trees in moist woods and swamps, Greenport and Southold.
- *Pellia Fabroniana* Raddi—Edge of stream in woods at Greenport. Dr. Conklin says "this is a rare species."
- *Riccardia pinguis* (L.) S. F. Gray—Among rushes on wet sandy shore of lake at Horton Point: and among grasses in brackish marsh at Orient; determined by Dr. Conklin and Dr. Evans.

Musci

- Amblystegium Kochii B. & S.—On old leather and wood in a shady place; determined by Dr. A. J. Grout.
- Fissidens minutulus Sull.—Small pieces of sandstone, under a shady bank, edge of lake at Horton Point; determined by Mr. G. B. Kaiser.
- Fontinalis dalecarlica B. & S.—Trunks of bushes in wet places; determined by Mr. Kaiser.
- *Hypnum curvifolium* Hedw.—All traces of this moss has disappeared where it was found in December 1909. This species should probably be referred to *Hypnum imponens* Hedw.
- Plagiothecium Roeseanum (Hampe) B. & S.—Wet shady place; determined by Dr. Grout.
- Pogonatum brevicaule (Brid.) Bv.—Wet stream bank at Greenport; determined by Mr. Kaiser.
- Polytrichum commune uliginosum Hueb.—Dry soil at Southold; determined by Mr. Kaiser.
- Sphagnum compactum DC.—Sandy bog at Southold; determined by Dr. A. L. Andrews.
- S. subsecundum Nees—The form called S. inundatum Russ. in a sandy bog at Southold; determined by Dr. Andrews.

PTERIDOPHYTA

POLYPODIACEAE

Dryopteris hexagonoptera (Mx.) C. Chr.-Moist woods, Gardiner's Island.

LYCOPODIACEAE

Lycopodium adpressum (Chapm.) Lloyd & Underw.—Orient in a brackish meadow; the first club-moss found at Orient. No Lycopodiums have been found on Gardiner's Island.

ANGIOSPERMAE

MONOCOTYLEDONES

ZANNICHELLIACEAE

Potamogeton diversifolius Raf.—In the lake on Horton Point. Zannichellia palustris L.—Shallow brackish stream, Gardiner's Island.

GRAMINEAE

Agrostis alba L.—The var. aristata Grav, collected by Mr. Frank Dobbin in woods at Greenport; determined by Mrs. Agnes Chase.

Andropogon virginicus L.—Moist sandy soil, Southold; determined by Mrs. Chase. Elymus halophilus Bicknell—Salt marshes. The very light glaucous green plants grow in tufts: and are never as tall as the other wild ryes.

- E. striatus Willd.—Rocky woods, Gardiner's Island; determined by Mr. Dobbin. Lolium multiflorum Lam.—Waste and cultivated grounds, rare at Orient; determined by Mrs. Chase.
- Panicum flexile (Gattinger) Scribn.—Dry sandy soil, Southold; determined by Mrs. Chase.
- P. Lindheimeri Nash-Dry ground, Mattituck; determined by Mrs. Chase.
- P. virgatum L.-The var. cubense Griseb., collected by Mr. Dobbin at Orient; determined by Mrs. Chase.
- Paspalum pubescens Muhl.-Dry pastures and cultivated fields; determined by Mrs. Chase.
- Syntherisma sanguinalis (L.) Dulac-Common in cultivated fields and waste places; often known by the name of "Flat-grass."

CYPERACEAE

Carex debilis Mx.-Greenport, the host of Puccinia Grossulariae.

C. laxiflora Lam.-Woodlands.

- Cyperus Grayii Torr.—Abundant on the sands at Horton Point; also in sandy woods at Mattituck. "Orient Point": in the State Herbarium are two specimens collected on Long Island many years ago. "New Jersey is usually given as the northern range of this species." N. Y. State Mus. Bull. 176: 44. 1915.
- C. Houghtoni Torr.—The specimens, previously reported from Orient, are probably referable to Cyperus Grayii Torr.

Orchidaceae

Blephariglottis psycodes (L.) Rydb.—Rich woods, Gardiner's Island; determined by Mr. Dobbin.

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- Gymnadeniopsis clavellata (Mx.) Rydb.—Moist woods, Gardiner's Island; determined by Mr. Dobbin.
- *Ibidium ochroleucum* (Rydb.) House—Dry hillsides, East Marion. The leaves are often half an inch wide: and the flowers, cream-colored and very fragrant. This species has been combined with *Ibidium cernuum* (L.) House: but the East Marion plants and those found in the Flora of the Lake George region, New York, appear quite distinct.
- Liparis liliifolia (L.) L. C. Rich.—Swampy wood at Orient, very rare; collected by Mr. Vinton Richard.

Pogonia ophioglossoides (L.) Ker-In a brackish meadow at Orient, rare.

DICOTYLEDONES

SALICACEAE

Salix caprea L.—The var. pendula Hort. "Roadsides, Orient Point." N. Y. State Mus. Bull. 176: 44. 1915.

Ulmaceae

Cellis occidentalis L.—Mr. Dobbin says he saw, Aug. 15, 1915 on Gardiner's Island. trees with trunks two feet in diameter.

MORACEAE

Morus rubra L.—Two trees, edge of dry woods, near an old pathway, Gardiner's Island; probably introduced; determined by Mr. Dobbin.

URTICACEAE

Urtica urens L.-Rare in low waste ground, Gardiner's Island.

POLYGONACEAE

Fagopyrum Fagopyrum (L.) Karst.—Persisting in cultivated ground and waste places.

Chenopodiaceae

Dondia linearis (Ell.) Heller-Salt marshes and beaches.

CORRIGIOLACEAE

Scleranthus annuus L .- Dry roadside, Greenport.

SAX1FRAGACEAE

Chrysosplenium americanum Schwein.—Along a muddy ditch in woods, Gardiner's Island; determined by Mr. Dobbin.

MALACEAE

Pyrus communis L .- Woods and hedges.

FABACEAE

Meibomia canescens (L.) Ktze.—Edge of dry woods, Gardiner's Island. Melilotus officinalis (L.) Lam.—Rare in fields at Orient. Vicia villosa Roth—Occasional in fields and waste places.

Geraniaceae

Geranium carolinianum L.—Orient in a sandy pasture. G. molle L.—Rare in a sandy pasture at Orient.

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Polygalaceae

Polygala ambigua Nutt .- Dry pastures, Orient and Gardiner's Island.

ELATINACEAE

Elaline americana (Pursh) Arn.—Shallow water of lake at Horton Point; determined by Mr. Percy Wilson.

VACCINIACEAE

Vaccinium vicinum Bicknell—In woods about a spring, Gardiner's Island, fruiting specimens Aug. 15, 1915. These specimens have been compared with the type in the Herbarium of New York Botanical Garden.

ASCLEPIADACEAE

Asclepias purpurascens L .- Moist place in woods, Gardiner's Island.

BORAGINACEAE

- Lappula virginiana (L.) Greene-Rich woods, Gardiner's Island; determined by Mr. Dobbin.
- Myosolis laxa Lehm.—Rare on muddy shores, Gardiner's Island; determined by Mr. Dobbin.

LABIATAE

Teucrium littorale Bicknell-Wet woods, shores and salt marshes, Gardiner's Island and Orient.

SOLANACEAE

Datura Tatula L.—More common at Orient than the white-flowered species, Datura Stramonium L., with which D. Tatula has been combined; collected by Mr. Dobbin.

LENTIBULARIACEAE

Utricularia geminiscapa Benj.—Shallow water of lake at Horton Point; determined by Dr. J. H. Barnhart. (Utricularia cleistogama (Gray) Britton.)

RUBIACEAE

Diodia teres Walt .- Moist pasture at Orient.

Ambrosiaceae

Iva frutescens L.-Salt marshes at Orient; determined by Mr. Dobbin.

Compositae

Gnaphalium purpureum L.-Rare in dry woods.

- Helianthus decapetalus L.-Moist woods at Orient; leaves a little narrower than usual and in whorls of four below.
- Ionactis linariifolius (L.) Greene-Sandy soil on Long Beach, Orient, rare.
- Mikania scandens (L.) Willd.-Edge of wet woods, Gardiner's Island; determined in part by Mr. Dobbin.
- Solidago speciosa Nutt.—Rare in dry woods at Orient. The specimen had entire leaves with ciliolate margins.